

In the Matter of: )  
) MB Docket No. 04-233  
Broadcast Localism )

**Comments of Edward A. Schober**

I am a licensed professional engineer in the State of New Jersey, and the Commonwealth of Pennsylvania who has specialized in the practice of designing and improving broadcast stations for the past twenty five years, and have been involved in engineering and managing broadcast stations for the past forty years. I am the licensee of FM translator W250AK, and am the applicant for an AM station in Enola, PA and for additional FM translator stations in New Jersey, Pennsylvania and New York.

**Statement**

Broadcast localism is important to me. I have seen the nature of broadcasting change since the passage of the Telecommunications Act in ways that have been very negative to localism, and in access to the means of expression. Consolidation of ownership has substituted ownership by large national entities for ownership by people who live and traded in the communities that the stations serve. The decisions concerning local content are made by employees of national entities, not by owners who are involved in the social and economic life of the individual markets served by the broadcast stations they own.

The awesome political and First Amendment power of broadcasting is held by fewer and fewer individuals who have less and less interest in the local markets of the stations they own. These same large broadcasters also control many other outlets of communications in these same markets, such as performance venues, billboards, magazines, etc. This concentration of control of means of expression establish a monopolistic access to advertising, music, comedy and political expression. Even the free-for-all Internet is coming under control of these entities by the policies of major media companies through gateway portals such as MSN, MSNBC, AOL and Yahoo.

Even if the Commission were to attempt to re-regulate media ownership to limit these monopolistic controls over access to the delivery mechanisms of expression, the present state of affairs will defeat the Commission's efforts. This is because the media companies now have adequate political power to protect their monopolies. This is because they already hold the gateways for political players to access their constituencies.

I do not believe that attempts by the Commission to substantially re-regulate media ownership is a practical undertaking. I will present some alternative proposals to enhance the value of some broadcasting outlets in promoting localism.

**Response to Inquiry**

**A) Definition of Local Community**

The Commission has interpreted Title III Section 307(b) of the Communications Act primarily through two mechanisms: The providing broadcast service to all areas of the United States, primarily to assure that rural areas are covered with adequate numbers of broadcast signals for alerting, public safety and basic information needs; and Assignment of stations to principal communities to provide "transmission services" to those communities. Under present regulations, the licensee of a station has little or no responsibility to municipalities other than its principal community. This is counterproductive, since it by nature leaves many communities unserved.

The stations in a market are judged to severally have responsibility to serve all the minority groups within the principal community, while a single licensee with several stations would probably better serve those minority groups by dividing the responsibility among the co-owned stations.

I propose that the Commission consider an alternative, multidimensional way of looking at providing "local service".

1) Geography – Communities do not consist only of municipalities, but sections of town, ghettos, counties, parishes, valleys, ports, and islands as well. In many areas, the municipality is not the major focus of the community. Some municipalities are too large for some classes of stations to serve the entire entity.

2) Interest Group – Foreign language, jazz, classical and other genre aficionados, ethnic culture, political discourse, comedy, etc. These specialties are sometimes dispersed throughout the entire service area of the station, with few users actually within the presently defined "Principal Community".

3) Market Area – Defined not by an individual municipality, but by the economic characteristics of an area. These market areas are conveniently defined by the Census Bureau and by Arbitron. The economic life of a station is often dependent upon its ability to serve all or most of these defined markets.

4) Protected Service Area of the Station – The resource consumed by a broadcasting station is the frequency allocation of the service area of the station. It seems to me logical that when a public resource is consumed in the public interest, that the area from which that resource is derived should be eligible for specific benefit.

**B) Consolidation**

The concentration of ownership of broadcast facilities, performance venues and other media have caused a monopoly power over the cultural life of America. An example of this monopoly power is in the field of music. If it were not for the free for all nature of the Internet and noncommercial educational radio, it would probably be impossible for a recording artist to be heard in America without a contract with a major media company.

The efforts of the RIAA and large media interests are likely to severely restrict Internet access for musicians in the future, as the portals to the Internet are being acquired by these same large media interests.

The result of the frustrations found by artists and publicists has caused many problems, such as pirate radio stations and Internet file sharing, that are merely attempts to outflank the large media interests efforts to control and optimize profits at the expense of art.

The encouragement of small media outlets will to some degree counteract the monopolistic power of the media conglomerates, as smaller outlets are uneconomic for a large organization to manage.

**C) Community Responsive Programming**

The FCC requires broadcasting stations to broadcast community responsive programming. There is often a severe disjoint between the station's principal community and the service area of the station. A class C FM radio station, for example serves an area of over 30,000 sq. km, and in may be licensed to a community of only 10 sq. km. It is folly to expect there to be economic benefit to provide programming for such a small portion of the area actually covered.

In my opinion, community responsiveness is a multidimensional criteria as well:

Programming can be ABOUT the communities in the service area of a station. Such as documentaries on the community, local news or features on members of the community.

Programming can be developed WITHIN the service area, such as music from local bands, local church services and local high school, college and professional football games where the team is from the service area.

Programming can be FOR USE IN the service area, such as weather and traffic information for locations within the service area of the station.

Programming can FOSTERS COMMERCE in the area, educating and informing the public about opportunities for business. This would be local advertising for businesses with facilities within the service area of the station.

Programming can support PUBLIC SAFETY, such as emergency information, Amber alerts, and hazard and attack warnings.

Each of these dimensions in programming is a valid basis for measuring local programming.

**D) Political Programming**

Unfortunately political discourse in the United States has become an Air War, and not a reasoned debate. My personal opinion is that no broadcast less than one minute in length can provide any useful information to help make a rational political decision. Any broadcast less than five minutes is unlikely to be of significant value.

I would suggest that stations who accept paid political advertising be responsible to broadcasting program length debates (live or produced) at no charge equal to 25% of the aggregate amount of sold time for that race.

**E) Payola and Sponsorship Identification, Voice Tracking and National Play lists.**

Sponsor identification may be impossible in the future. Movies, a staple for TV broadcast are now rife with paid "product placement" This product placement is not readily in the control of the broadcaster. Copyright rules make it impossible to remove product or image placement in the movie.

Venues and events are similarly branded today so that incidental product advertising is no longer within the control of the broadcaster.

Media conglomerates have a commercial interest in the music presented on their stations and are free to promote the acts for which it has an economic interest at the expense of other acts. For example, a broadcaster who owns the major performance venue in a community will play music from acts which are scheduled for performance at that venue to the exclusion of acts which do not. Announcement of such interest should be made.

I see no particular evil in voice tracking, as long as it is not coupled with national play lists and is developed for the individual station. Smaller independent stations may not be financially viable without this technique.

**Additional Spectrum Allocation**

**F) LPFM**

The institution of LPFM service has improved localism to a small degree. Unfortunately most LPFM stations have been located in areas with low population, and as such have not helped very much with providing alternative voices in large metropolitan areas, particularly for minority and special interest programming that would serve embedded communities within a market.

One additional limitation on LPFM stations is the proscription on advertising on LPFM stations. I am not suggesting changing the essential noncommercial nature of LPFM stations. High quality programming is expensive to produce. Local programming cannot be re-used in other markets, so the total costs of production must be recovered from the transmission of the programming on a single LPFM station.

I recommend that the FCC permit commercial messages during and immediately adjacent to programs which are locally produced and transmitted only by the LPFM station. This will encourage and make financially viable more extensive local programming on LPFM stations.

I propose that locally produced programming be defined as programming material where 80% of the program is produced live or recorded within the service area of the LPFM station. Additionally other programming could be deemed locally produced if it relates only to the service area of the LPFM station. Weather or traffic reporting, would meet this requirement, even though the program may have been recorded elsewhere. Prerecorded music recorded outside the service area of the station should not be included in percentage of time calculated as local.

Advertisements within and adjacent to locally produced programs should also be permitted for Noncommercial Educational FM stations.

**G) CONVERSION of CLASS D NONCOMMERCIAL EDUCATIONAL FM STATIONS**

There also is some advantage in conversion of grandfathered class D noncommercial FM stations to LPFM LP-100 and LP-10 stations when the ownership requirements for LPFM stations are met. Some of these stations are limited by the 10 Watt transmitter power limit, and could readily operate at higher power.

The 10 Watt class D noncommercial educational FM stations might all be converted to LP-10 stations to eliminate the problem of administering a special grandfathered class of stations.

**H) RELAYING OF LPFM STATIONS BY TRANSLATOR**

The service area of an LP-100 or LP-10 station often cannot cover the entire municipality to which it is licensed, certainly not its County or Parish, and not its Arbitron or MSA. LP-100 and LP-10 stations should be permitted to be translated on FM translators located anywhere within the same county, parish, MSA or Arbitron Market, and perhaps anywhere within a 50 km radius.

**I) LOCAL ORIGINATION BY FM TRANSLATORS**

FM translators, as now authorized, bring relatively distant signals of full service FM stations to areas where the signal of the full service station does not provide adequate service. The FM translators as now authorized provide no opportunity to add local content. In its quest for localisms in broadcasting, FM translators could serve that need.

Full service stations that are translated often include program components which do not particularly relate to the translator service area. An excellent example would be traffic and weather reports for the primary station's service area; Translators would provide an important local program feature by substituting traffic and weather reports for the translator service area for those of the primary station. Translators should not be permitted to substitute programming of the primary station without permission to do so from the licensee of the primary station.

There is a substantial public interest reason for translator stations to substitute programming as long as it is specifically local to the service area of the translator, and replaces similar programming on the full service station that relates to its own service area, and not that of the translator's service area.

Examples of additional substitutions: Local church services, local sports games, local concerts, local alerts and warnings, local commercials for businesses within the translator service area, local political advertisements and programs, local "want ad" shows, local news, etc.

Translators could be equipped to substitute programming from a computer automation system that could be triggered to insert the substitute programming on command from the full service station, or by time clock. The programming could be sourced from within the service area of the translator or from the full service station.

**J) LONG DISTANCE FM TRANSLATORS FED BY SATELLITE**

There are several FM translator operators who have vast networks of FM Translators fed by satellite from a single or several full service stations. These translators currently provide no local programming, as the full service primary stations may be many states away. "National" service of this type is better accomplished by true satellite radio, such as XM and Sirius or by Internet streaming. I see no public interest in furthering long distance FM translators.

I recommend that no new long distance FM translators be authorized. I also propose that translators with long distance feeds be considered as tertiary services, that may be replaced with LPFM or FM translators proposing to relay primary stations meeting the distance or local service requirements. Long distance translators would be "bumped", just as normal FM and LPFM stations may be replaced by full service stations. Translators whose primary stations become distant stations, either by changing primary stations or, for example, the primary station no longer providing foreign language programming, would simply become tertiary services.

There are much more efficient methods of providing this type of service than tying up FM spectrum for this purpose. I refer to long distance translators as those not meeting the distance or affinity requirements proposed below.

In the context of localism, there should be some relationship between the translator and the primary station. It is fairly easy to see situations that clearly should be permissible:

1) If the translator located is in any County, Parish, MSA or Arbitron Market that is wholly or partially served by the protected contour of the primary station.

2) If the translator is within some specific distance of the primary station's transmitter site or reference coordinates of its principal community. I propose 120 km as a reasonable distance.<sup>1</sup>

3) Within the 30 dBuV F(50,50) contour of the primary station.

There are also cases where exceptionally large distances between the primary station and the translator may be appropriate:

1) Where the primary station is owned by an educational institution and the translator serves another campus of the same institution.

2) Where the translator is located in an area with little radio service.

3) Where the translator is relaying a primary station that broadcasts a substantial amount of programming in a foreign language not broadcast locally.

4) Where the translator is located in a community with strong economic ties to the service area of the primary station, such as a primary resort area associated with a city.

5) Where the primary station is owned by a church, and the translator serves an area where another church of the same denomination is located.

6) Where the translator is in the same state as some portion of the service area of the primary station.

7) Where the translator 60 dBuV F(50,50) contour includes the main studio location of the primary station.

Although these qualifications may seem complicated, they are individually easy to evaluate. Some conditions could be transient, such as a translator with foreign language programming, where the primary station changes language or a local station begins operating in the translator's service area with the same language. In the case where the original licensing criterion are not met, the translator becomes a tertiary service which is subject to replacement by a local translator.

**K) ALTERNATE FEED FOR FM TRANSLATORS**

FM translators that operate in the non-reserved band that are not "fill in" translators are currently required to use a technique called "direct off-air" pickup. The purpose of this restriction, as I understand it, is to limit the distance that an FM translator may be authorized outside the service area of the originating full service FM station.

There are many methods of delivery of programming from the primary station and the translator, including direct-off-air, satellite, Internet streaming, ISDN, frame relay, private microwave, aural intercity relay, piggyback on video STL, etc. There is no reason for regulation of the method of delivery of the primary station signal to the translator unless it is required to meet some public interest.

This regulation has several negative consequences unrelated to the intention of the rule:

1) Direct off air pickup is not compatible with IBOC digital transmission by FM translators. In many cases where analog FM works well the IBOC signal cannot be retransmitted. This problem is due to adjacent channel interference, and because there is no way to regenerate off air digital signals under the present regulation.

2) The quality of retransmission is reduced by the artifacts of the link receiver, low signal strength and adjacent channel protection filters. This provides a lower quality service to FM translator listeners.

3) Third, the quality of the retransmission is reduced in quality and reliability by variable propagation effects, such as aircraft multipath flutter, temperature inversions and tropospheric ducting.

4) Long established translator service can be lost when new or changed full service stations interfere with the input of the translator that previously was acceptable. This is counter to public interest when established listeners lose service from a translator that can no longer receive the primary station, but could easily receive it by other means.

5) Low Power FCC Part 15 devices cause interference to the translator inputs and also "capture" the translator. When capture occurs, the XM Satellite radio, Sirius Satellite radio or CD player in cars passing by replace the program of the primary station for short periods.

6) I expect that capture of FM stations will be a new way for pirate radio operators to broadcast without having to pay rent for a tower, avoid breaking current FCC rules and acquire an instant audience – the audience of the translator. Under the present rules there is no way to sanction such a pirate, and no method to silence such a pirate before the FCC notifies him or her in writing.<sup>2</sup>

7) FM translators cannot retransmit cochannel or first adjacent channel primary stations when using direct over the air retransmission.

8) FM translators may be precluded from using the best sites to provide the desired coverage because terrain shielding or other geographical obstructions may block the signal from the primary station at the location that would provide optimal coverage of the target area.

Calvary Chapel of Twin Falls, Inc. et al. has filed a petition for rulemaking, RM-10609 proposing that FM Translators operating in the non-reserved band be permitted signal delivery by satellite. I recommend that RM-10609 be consolidated with proceeding, as the issue of long distance satellite delivery is closely related to the localism issue. I agree with Calvary that the method of delivery of the signal from the primary station to the translator is not important from a regulatory perspective. The only issue that the FCC should concern itself with in this relation is whether the public interest is served by repeating a given primary station to the service area of each specific translator. I have detailed above my recommendations on a reasonable set of geographic, cultural and economic relations between the service area of a primary station and its translators.

**L) CONVERTING FM TRANSLATORS TO LPFM STATIONS**

Some FM translators meet allocations requirements for LPFM LP-100 or LP-10 stations. Provided that the ownership and technical requirements are met, I propose that an FM translator may be converted by application to an LPFM station at the same location.

Where the need for local LPFM service exceeds the need for an FM translator in an area, and the other requirements are met, the use of the FM frequency resource should be able to be changed with a minimum of effort. This is clearly in the public interest.

I do not think that it would be desirable for LPFM stations to be permitted to change to FM translators in this manner.

**M) REPEATING OF AM STATIONS ON FM TRANSLATORS**

There is no difference between the end product of an AM station and an FM station, as far as the listener is concerned. The consumer gets identical benefit from both classes of Aural Service. The class B, C and D stations are however hampered by an interference ridden, small night service area. In many communities a class C or D station with only a tiny, or class B station with a small night service area is the only transmission service. Many AM stations provide the only truly local voices in their community.

I believe it is important to permit class B, C and D AM stations to be repeated on a FM translators within the AM station's daytime protected contour. It is only fair, and clearly in the public interest that these communities can have the best available service within the bounds of good engineering. Adding a small FM service

Permitting FM translators to translate AM stations will allow the AM station licensees a chance at providing real 24 hour service to their communities, and serve the cause of localism by providing local service at night to many communities that have no local service at night.

I also suggest that the geographical, economic and cultural limits that I outlined in paragraph J above be considered for AM stations also, although providing full time service within the AM daytime 0.5 mV/m is a much more important goal in fostering localism in broadcasting.

**N) THIRD ADJACENT CHANNEL PROTECTION BY LPFM, NONCOMMERCIAL EDUCATIONAL FM AND FM TRANSLATORS**

The record is perfectly clear that low power FM transmissions cause negligible interference to full service FM stations. I strongly recommend that third adjacent channel protection to any station operating in the FM band be eliminated for any station of any class operating at 100 Watts ERP or lower.

Such a revision to the rules is clearly in the public interest. It will permit many additional LPFM stations and some additional full service Noncommercial Educational FM stations in areas needing local service. The small coverage of these stations will by their very nature provide a high likelihood of providing true local service.

Since the potential for interference is only related to the ERP of the station, this elimination of third adjacent channel protection should not be related to antenna height, as any potential for interference decreases by raising the antenna further above ground.

**Conclusion**

I believe that localism should be measured by a different yardstick than is currently used. My propose yardstick comprises metrics of Geography, Interest Group, Market area and Protected Service area of the station.

Consolidation, not only in the broadcast marketplace, but in film, performance venues and other electronic media threaten to stifle creativity and raise the specter of monopoly power. Encouraging smaller community based media outlets will counteract this monopoly power because the smaller outlets are uneconomical for large entities to manage.

Community responsive programming needs to be viewed with a multidimensional focus. Programming is local if it is ABOUT, developed WITHIN, FOR USE IN, fosters COMMERCE, or supports PUBLIC SAFETY of a community.

Political broadcasts are of limited value if they consist of only sound bites. I recommend that for every four minutes of political advertisement sold one minute should be banked for debates or other noncommercial program length political programming.

Payola and other hidden advertisement is nearly impossible to cure. The advent of program placement in movies which are subsequently broadcast is another area of concern.

On the focus of additional spectrum, I have stated many positions: LPFM stations should be permitted to have limited advertisement adjacent to and within local protected programming, as should Noncommercial Educational FM Stations so that there is a real economic foundation for truly local well produced programming.

Conversion of Class D Noncommercial Educational FM stations to LPFM stations would appear to be a way to optimize the use of spectrum and decrease the cost of administering these grandfathered stations.

LPFM Stations should be permitted to be translated by FM translators, but because of their intensely local focus, have more restrictions on the distance that the translator may be from the LPFM station than from a full service FM station.

Permitting FM translators to originate only local programming with the consent of the primary station will greatly enhance the cause of localism.

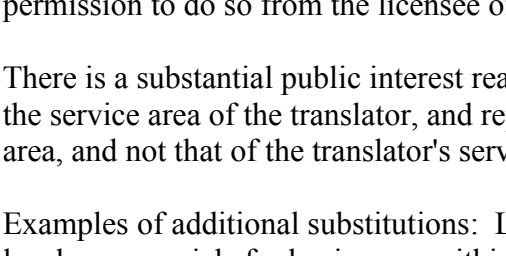
Setting specific Geographic, Economic and interest criteria on the location of an FM translator relative to the primary station is essential. FM translators should not provide national service. XM Satellite and Sirius provide this service.

Once limits on the location of translators relative to the primary station are set, there is no reason to limit the method of program delivery from the primary station to the translator. Satellite, Internet, ISDN, microwave and direct-off-air should all be permitted. Direct off air delivery limits the reliability and quality of the FM translator signal and should not be required. Rulemaking RM-10609 should be consolidate with this proceeding.

Where technically feasible, FM translator owners who meet the ownership requirements for LPFM stations, an FM Translator should be able to convert the FM Translator to an LPFM station by application.

Class B, C and D AM stations should be allowed to be the primary stations for FM translators. These stations often are the only source of local programming and they do not provide service to their entire daytime service area at night. Full time service to communities is required, and there should be no segregation of the Aural services as far as access to translators.

Respectfully Submitted,



Edward A. Schober, PE  
Haddon Heights, NJ

<sup>1</sup> I do not believe that the distance from the primary station to the translator should be related to the class of the primary station. The only question of interest is whether the programming of the primary station is likely to be in the public interest of the listeners of the translator. For example; a low power state college station may be of great interest at the other end of the state, whereas a Class C commercial station may transmit a network format that is duplicated by another station in the translator's community.

<sup>2</sup> A radio pirate" can assemble a complete station to hijack a translator from a battery powered mp3 player, a Part 15 authorized FM broadcasting device, some rechargeable batteries and a solar battery for under \$100. All components for this device are available at Best Buy, Circuit City and Radio Shack. This assembly can be hidden within several hundred meters of an FM translator and "capture" the over the air pickup replacing the programming of the primary station with that of the "pirate". A single CD-R will provide up to three days of programming unattended. With a timer such a device could broadcast a pirate manifesto for weeks before discovery if the device were sufficiently well hidden. My reading of the part 15 rules indicates that such a "Pirate" operation would be completely compliant with the regulations until the operator is notified by mail by the FCC that it is causing interference. If such a device is discovered and removed, it is inexpensive enough that a "Pirate" could replace it at will.